

AMENDMENTS TO THE CLAIMS:

Please cancel Claims 1-19 and substitute new Claims 20-31 as follows:

20. A filtering membrane for separation of one substance from another substance, wherein at least one of said substances is a fluid, said membrane comprising:

a first film made from a polymer material;

a second film made from a polymer material;

a plurality of welding seams that connect said first film to said second film and form at least a first closed cell and a second closed cell, said first closed cell and said second closed cell being interconnected through said welding seams penetrable only to said one substance and not penetrable to said another substance;

said first closed cell having an inlet opening formed in said first film for the supply of said one substance and another substance into said first cell, said second closed cell having an output opening formed in said second film for discharge of said one substance penetrated into said second closed cell through said welding seams;

said welding seams having a structure, which at least partially is an amorphous structure;

at least one of said first film and said second film having crazes.

21. The filtering membrane of Claim 20, wherein said crazes are filled with a craze-filling material selected from a group consisting of a solid material, a liquid material, and a gaseous material.

22. The filtering membrane of Claim 21, wherein said craze-filling material is selected from a group consisting of a material for controlling dimensions of said crazes, a treating material for treating said one substance, a material for treating said another substance, and a material for treating both said first substance and said another substance.

23. The filtering membrane of Claim 22, wherein said liquid material is a material with a high coefficient of thermal expansion for expanding the volume of said crazes during said welding.

24. The filtering material of Claim 22, wherein said treating material is an electrically charged material.

25. The filtering membrane of Claim 20, wherein said amorphous structure comprises more than 50% of said structure.

26. The filtering membrane of Claim 25, wherein said amorphous structure comprises 100% of said structure.

27. A filtering membrane for separation of one substance from another substance, wherein at least one of said substances is a fluid, said membrane comprising:

- a first film made from a polymer material;

- a second film made from a polymer material;

- a plurality of welding seams that connect said first film to said second film and form at least a first closed cell and a second closed cell, said first closed cell and said second closed cell being interconnected through said welding seams penetrable only to said one substance and not penetrable to said another substance;

- said first closed cell having an inlet opening formed in said first film for the supply of said one substance and another substance into said first cell, said second closed cell having an output opening formed in said second film for discharge of said one substance penetrated into said second closed cell through said welding seams;

- said welding seams having a structure, which at least partially is an amorphous structure;

- said polymer material of said first film and said polymer material of said second film being selected from the same polymer materials and different polymer materials;

- said polymer material of said first film and said polymer material of said second film being thermoplastic polymer materials;

- at least one of said first film and said second film having crazes.

28. The filtering membrane of Claim 27, wherein said crazes are filled with a craze-filling material selected from a group consisting of a solid material, a liquid material, and a gaseous material.

29. The filtering membrane of Claim 28, wherein said craze-filling material is selected from a group consisting of a material for controlling dimensions of said crazes, a treating material for treating said one substance, a material for treating said another substance, and a material for treating both said first substance and said another substance.

30. The filtering membrane of Claim 29, wherein said liquid material is a material with a high coefficient of thermal expansion for expanding the volume of said crazes during said welding.